

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF OKLAHOMA

STATE OF OKLAHOMA, ex rel,)	
W.A. DREW EDMONDSON, in his)	
capacity as ATTORNEY GENERAL)	
OF THE STATE OF OKLAHOMA,)	
et al.)	
)	
Plaintiffs,)	
)	
vs.)	No. 05-CV-329-GKF-PJC
)	
TYSON FOODS, INC., et al.,)	
)	
Defendants.)	

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TRANSCRIPT OF NONJURY TRIAL PROCEEDINGS
JANUARY 6, 2010
BEFORE GREGORY K. FRIZZELL, U.S. DISTRICT JUDGE

REPORTED BY: BRIAN P. NEIL, CSR-RPR, RMR, CRR
 United States Court Reporter

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1 Wednesday, January 6, 2010

2 * * * * *

3 THE COURT: Tell me about the Rausser
4 Research Institute.

5 THE WITNESS: Oh, you have?

6 THE COURT: I just did a quick Google.
7 It's a lovely place. Tell me about it.

8 THE WITNESS: It's a ranch. I've got
9 cattle, beef cattle, a lot of horses that my children
10 don't ride. In addition, there is a vineyard.

11 THE COURT: You spread poultry litter?

12 THE WITNESS: I buy poultry litter for
13 fertilizer on the grass that's fed to the -- to the
14 beef cattle.

15 THE COURT: Do you soil test before you
16 put them down?

17 THE WITNESS: No. But my ranch manager
18 does.

19 THE COURT: Okay. Mr. Hopson.

20 **CONTINUED DIRECT EXAMINATION**

21 **BY MR. HOPSON**

22 Q. All right. Before we broke, Dr. Rausser, we
23 were about to turn to a discussion of oligopsony
24 power. And I'd like to just start by having you
25 define for His Honor the term "monopsony power."

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1 A. Monopsony power is when you have a single
2 buyer --

3 THE COURT: I think we've covered
4 that.

5 A. -- and it's total symmetrical with monopoly
6 power on the other side of the market.

7 Q. (BY MR. HOPSON) And oligopsony power is
8 symmetrical then with the --

9 A. Oligopoly power. But there have got to be
10 many buyers in that case. Not many, but more than
11 one.

12 Q. Are there in your field of study fairly
13 standard and well-accepted methods or approaches to
14 studying whether or to what extent a group of buyers
15 has oligopsony power?

16 A. Yes, indeed.

17 Q. Okay. And have you prepared a demonstrative
18 exhibit to walk us through the steps or methodology
19 that would be involved in that analysis?

20 A. I have.

21 Q. Okay.

22 MR. HOPSON: Let's see Tyson Defendants
23 Demonstrative 341. And if we could just zoom in on
24 that a little bit, particularly the five points down
25 below, yes.

1 Q. (BY MR. HOPSON) So, Dr. Rausser, again, just
2 using this as a reference point, what's the first step
3 an economist would have to undertake in order to begin
4 an analysis of whether a buyer or a group of buyers
5 had monopsony or oligopsony power?

6 A. The first step is to find the scope, the
7 product scope and the geographic scope, of the
8 relevant market. You can't determine whether it's
9 possible to exercise power unless you know the limits
10 of the product scope.

11 If, for example, a monopsonist came along and
12 attempted to lower prices but that seller could easily
13 switch to some other product -- the production of some
14 other product, then you have the wrong relevant market
15 and you can't do the analysis. So the first step is
16 to identify the product and geographic scope of the
17 relevant market.

18 Q. And the second step referencing
19 concentration, what is that about?

20 A. If you're looking at oligopsonistic power,
21 you have to look at what is the concentration.
22 Suppose you're attempting to evaluate if there are
23 eight buyers in a particular market but the
24 distribution is uniform across those eight buyers.
25 That's a much different possible consequence than if

1 it's very concentrated.

2 Q. Your third point is switching. Why is
3 switching relevant to this analysis?

4 A. Switching is critical. Because it goes to
5 what can a grower do in response to an attempt by a
6 processor to in effect exercise power and take away
7 some of the rents or returns that the grower would
8 otherwise achieve. But if the grower has options,
9 other alternatives, then that limits in a dramatic way
10 any attempt to exercise oligopsonistic power.

11 Q. Why, if it is, is cost of entry relevant to
12 this analysis?

13 A. That's particularly important because think
14 about the logic. If, in fact, someone is attempting
15 to exercise oligopsonistic or monopsonistic power and
16 it turns out that they're successful in lowering the
17 price, that invites entry of other processors to come
18 in because they can offer a still higher price and
19 still make large profits.

20 So as a result, the entry barriers are
21 critical. You can't do a monopsonistic or
22 oligopsonistic analysis without looking at the
23 incentive for new entrants to come in and dissipate
24 whatever power you're attempting to exercise.

25 Q. Okay. And finally, to what extent does an

1 examination of price suppression or prices below
2 anticompetitive levels, to what extent is that
3 necessary to this analysis?

4 A. That's the ultimate conclusion, to look at
5 the actual world versus the counterfactual or but-for
6 world. In the but-for world, the presumption is
7 they're competitive determination of prices.

8 Now, in the actual world, are the prices that
9 are being paid, are they different than the
10 counterfactual competitive world? And that must be
11 tested statistically to see whether or not there's a
12 significant difference.

13 Q. And to what extent is what you've reflected
14 on Demonstrative 341 a standard analysis in the field
15 of economics?

16 A. It's a standard analysis. In every handbook
17 on industrial organization or market power, you'll
18 find these steps outlined in one form or another.

19 Q. To the extent that Dr. Taylor testified in
20 this courtroom that such an approach was unnecessary
21 because he was not offering an antitrust analysis,
22 would you agree with that assertion?

23 A. No.

24 Q. Why not?

25 A. Because you're focusing on a hypothesis that

1 monopsonistic or oligopsonistic power is being
2 exercised. You've got to be able to analyze whether
3 that question is supported by the empirical facts. As
4 a result, you have to go through these steps antitrust
5 or not.

6 Q. Well, to the extent that Dr. Taylor asserted
7 that the approach reflected in Demonstrative 341 was
8 not necessary because he was engaged in descriptive
9 economics, rather than normative economics, would you
10 agree with that assertion?

11 A. No, I do not.

12 Q. Why not?

13 A. First of all, normative economics is a value
14 judgment. It focuses on what ought to be which
15 requires someone's value judgment. Economists are not
16 in the business of advancing value judgments. They
17 can determine what the consequences are of a
18 particular value judgment.

19 For example, suppose a particular society
20 decides they want an even distribution of income, an
21 economist can evaluate what the possible consequences
22 would be with regard to economic growth of such a
23 value judgment. Descriptive economics is as the name
24 suggests, describing. It doesn't do any formal
25 analysis.

1 What's required if you're going to assess
2 whether power is being exercised in the IRW by the
3 integrators you have to do positive economics, explain
4 what is, what is going on. That's what these steps,
5 these five steps, are designed to do.

6 Q. Okay. Let me turn the page slightly here and
7 ask if you recall in Dr. Taylor's report and his
8 testimony an assertion that integrators have power or
9 leverage over growers because growers undertake a very
10 long-term investment in building houses and acquiring
11 equipment, and yet they're entering into contracts
12 that only guarantee them one flock of birds.

13 Let me just ask you first: Do you recall
14 that assertion or argument in Dr. Taylor's analysis?

15 A. Yes, I do.

16 Q. Do you agree that that indicates a form of
17 market power or potential leverage in this case?

18 A. That -- it's possible. But then you have to
19 go on and ask the question about the long-term
20 investment of the buy side of this market; namely, the
21 integrators and/or processors. They make long-term
22 investments as well, and you have to stop and look at
23 their economic incentives vis-a-vis the growers'
24 economic incentives. It is neither necessary or
25 sufficient to infer that power's being exercised

1 because growers make long-term investments.

2 Q. To what extent are inter -- to what extent,
3 if any, are integrators dependent upon supply of birds
4 for their processing units?

5 A. It's critical. Their economics is driven in
6 large part by throughput, by handling a large volume,
7 moving the product, capturing the value downstream
8 either through the food service channel or through
9 grocery store channels. They are in the business of
10 moving large volumes.

11 And now with the export markets expanding, at
12 least over the course of the last few decades, that's
13 another important source for moving volume. It's in
14 their interest to have growers that are very efficient
15 that are generating enough volume to fully utilize
16 their existing capital infrastructure.

17 Q. And to what extent in this industry, based
18 upon your study, are integrators competing among
19 themselves for the best or most efficient growers?

20 A. You see it in terms of how the incentives in
21 the contracts are designed with regard to the
22 tournament feature of those contracts. You see it in
23 terms of the testimony from the growers here in this
24 courtroom about the switching that's taking place.

25 There's a declaration by a Simmons official

1 indicating that they lost a large number of growers in
2 one particular year. It was well over a hundred that
3 they lost in one particular year that switched to
4 another integrator.

5 Q. Do you recall whether that was a hundred
6 houses or a hundred growers?

7 A. I believe it was houses.

8 Q. Okay. Let me ask you this: Based on your
9 own review of the record, evidence, and the materials
10 you took into account in preparing your report, have
11 you seen any evidence in the IRW of threatened or
12 actual withholding of flocks being used as an exercise
13 of leverage by the integrators?

14 A. No, I've seen no evidence. And I'm sure that
15 if it had existed, it would have been advanced, I
16 presume, by the plaintiffs.

17 Q. Let me ask you about this: Dr. Taylor and I
18 talked about what he referred to as a
19 take-it-or-leave-it contract issue. Do you know what
20 I'm referring to?

21 A. Yes.

22 Q. And if I can paraphrase, to the extent that
23 Dr. Taylor suggested that the fact that the individual
24 contracts between growers and integrators are not
25 negotiated as to their substantive terms, that itself

1 reflects a form of market power. Would you agree with
2 that assertion?

3 A. No.

4 Q. Why not?

5 A. Because there are two reasons. The first is
6 that in a competitive marketplace, you would find the
7 evolution of the contracts moving toward a
8 standardized contract. In a market in which there's
9 competitive forces at play, you would expect the
10 contract to be standardized, standardized with regard
11 to pricing, standardized with regard to quality
12 control, standardized with regard to who shares the
13 risk. And that's, in fact, one reason for why you
14 would find all the contracts to be very similar.

15 A second reason is regulations themselves.
16 GIPSA, for example, has included poultry since, I
17 believe, the late 1980s before it just pertained to
18 the other meats. But GIPSA as the regulator is out
19 there attempting to create uniform contracts where all
20 growers are treated similarly; that is to say there is
21 no discrimination. You can't find a particular
22 processor that discriminates across growers depending
23 upon their particular idiosyncratic conditions.

24 As a result, those are the two forces that
25 are out there, the two reasons that lead to uniform

1 contracting, which eliminates the need for costly
2 negotiation.

3 Q. Let me ask you this: Can you give me an
4 example of a competitive market outside the poultry
5 industry in which individualized negotiation of
6 contracts is absent?

7 A. Outside of the poultry industry?

8 Q. Yeah, yeah.

9 A. Oh, there's a number of industries. Fresh
10 fruits and vegetables contracting, Wal-Mart's
11 contracting with regard to suppliers.

12 Q. Let me turn the question a little bit
13 differently and ask you about this.

14 Based on your review of Dr. Taylor's
15 testimony and the rest of his materials and all you
16 considered, did you find that Dr. Taylor did any
17 analysis of whether price or supply were suppressed to
18 a subcompetitive level in the market between growers
19 and integrators in the IRW?

20 A. He did not.

21 Q. Does the fact that there is evidence that
22 growers earn outside income or nonfarm income, does
23 that fact tend to support evidence that prices are at
24 a subcompetitive level?

25 A. No.

1 Q. Have you looked at the relationship between
2 off-farm and farm income in connection with your work
3 on this case?

4 A. Yes, I have. Because of one of the claims of
5 Dr. Taylor.

6 Q. If we look at -- did you prepare a
7 demonstrative relating to this issue?

8 A. I did.

9 Q. Okay.

10 MR. HOPSON: Can we please see Tyson
11 Defendants Demonstrative 342?

12 Q. (BY MR. HOPSON) And could you just tell us
13 briefly what we see on that demonstrative, what that
14 shows us?

15 A. Yes. On the horizontal axis is time, years.
16 These are observations that are made each annual
17 calendar year. On the vertical axis is farm and
18 nonfarm income, and this is reported by the Economic
19 Research Service of the USDA. And what you have here
20 as the green line -- by the way, this is not just for
21 poultry producers. This is for --

22 Q. I was going to ask you: Is this all farms?

23 A. All farms. All farms. And what the green
24 line shows is off-farm income. What the red line
25 shows is farm income. You'll see that for agriculture

1 as a whole in the United States there is -- much of
2 the income that's generated by the household is
3 sourced with off-farm activities in contrast to actual
4 farm activities.

5 Q. Let me ask you -- and I don't have a
6 demonstrative -- but did you also in your report do an
7 analysis of the percentage of off-farm income for
8 poultry-growers as opposed to other farmers or persons
9 engaged in agriculture?

10 A. Yes, I did.

11 Q. And what did that show?

12 A. What that shows is that if you look at
13 poultry producers themselves, they're generating
14 relatively more income on-farm than off-farm relative
15 to all of agriculture.

16 Q. Let's go back and explore the issue of
17 switching a little bit.

18 I want to ask you if the available evidence
19 that you've had a chance to review and analyze
20 indicates whether there is switching of growers
21 between integrators going on in the Illinois River
22 Watershed?

23 A. Yes. And here, a lot of it's anecdotal
24 evidence. But also to the extent that the growers who
25 have testified in this court, you'll see that each of

1 those growers speak directly about switching that's
2 taking place with regard to their poultry production.

3 Q. Okay. To the extent that Dr. Taylor has
4 testified that the growers' ability to switch or that
5 actual switching is not relevant to his oligopsony or
6 market power opinion, would you agree with that
7 assertion?

8 A. I would not.

9 Q. Why not?

10 A. Because as you go back to the prior two
11 slides ago when I went through those five steps, one
12 of the critical issues is whether or not a grower has
13 the option either to switch to another integrator, or
14 for that matter, to switch to another economic
15 enterprise. If they have that set of alternative
16 options, then that has a counter effect of any
17 attempts by an integrator to exercise market power.

18 Switching's critical. If you look at the
19 Department of Justice, each and every time they do an
20 evaluation of possible abuses of monopoly or
21 oligopolistic power, they look at switching.
22 Switching is critical.

23 Q. Well, to the extent that Dr. Taylor has
24 suggested that the switching in this instance is not
25 significant because all the prices are the same, would

1 that affect your analysis?

2 A. Well, the prices in terms of the stated
3 contract, but there are lots of other terms and
4 conditions of that contract that influence the actual
5 compensation. So no, I would not.

6 Q. Okay. Let me ask you this: In the end,
7 Dr. Rausser, do you have an opinion on whether
8 Dr. Taylor's analysis properly captures or describes
9 or evaluates the market power dynamics in the Illinois
10 River Watershed?

11 A. It does not.

12 Q. Does anything in Dr. Taylor's economic
13 analysis shed any light on the question of whether
14 integrators have actual or potential control of the
15 litter that's generated as part of this grow-out
16 process?

17 A. It does not.

18 Q. Do you know from your own work in this
19 area -- and, again, by that I mean in this
20 industry -- what role the litter has played in the
21 economic relationship or the economic life of growers?

22 A. Yes. It is a byproduct that has value to the
23 growers, particularly if they're integrated. By
24 "integrated," I mean if they have a cow-calf operation
25 along with a poultry enterprise.

1 In fact, as we saw in the testimony of one of
2 the growers, that grower integrated backward into
3 poultry because he wanted access to the fertilizer
4 value of the litter which allowed him to expand his
5 cow-calf operation and generate more than another
6 \$40,000 worth of income as a result of the increase in
7 productivity of his grassland with regard to his
8 cow-calf operation.

9 So if you look at all of the cooperative
10 extension circulars that come out of the land-grant
11 universities in Arkansas and Oklahoma, you'll see that
12 when they prepare the various economic issues, or the
13 economics of becoming involved in poultry production
14 at the grower level, they include litter as an
15 economic value. That's either an internal, imputed
16 value or it has an external value with regard to its
17 marketability.

18 Q. To the extent that poultry litter has become
19 regulated in many states, certainly here in Oklahoma,
20 does that in any way impact or undermine your analysis
21 that the litter has economic value to the growers?

22 A. No. It still has economic value, but now
23 there's some costs associated with it that is borne by
24 the grower because of those regulations.

25 But the economic question that's got to be

1 asked is, what is its substitutability with chemical
2 fertilizers? Chemical fertilizers have become
3 significantly more expensive as these regulations have
4 increased, which has had the net effect of increasing
5 the economic value of litter.

6 *(Discussion held off the record)*

7 Q. (BY MR. HOPSON) I want to turn subjects
8 here, Dr. Rausser, and I want to ask you if you
9 reviewed Dr. Gordon Johnson's report, testimony, and
10 considered materials regarding his calculations of
11 average STP levels in Oklahoma and Arkansas?

12 A. Yes, I have.

13 Q. Okay. And specifically, did you review his
14 testimony in this courtroom regarding average STP
15 levels for certain counties in Arkansas and Oklahoma
16 that are within the IRW?

17 A. Yes.

18 Q. Okay. Have you formed an opinion about the
19 reliability and value of Dr. Gordon Johnson's analysis
20 of those average STP levels?

21 A. Yes, I have.

22 Q. Let me ask you this: Is your analysis and
23 evaluation of this based solely on statistical
24 principles, or does it also rely upon expertise in
25 agronomic and soil sciences?

1 A. Only statistical principles.

2 Q. Okay. Are you familiar with issues involving
3 nutrient value and agronomic's and soil science from
4 other aspects of your work?

5 A. Certainly. When I was dean of the College of
6 Natural Resources, there are ten or twelve soil
7 scientists that are faculty within the College of
8 Natural Resources. I had to review their merits every
9 time they came up for a salary evaluation as the dean,
10 and I'm familiar with the methodology that they use,
11 but I'm certainly no expert -- soil scientist expert.

12 Q. But the analysis you're about to give us is
13 based on statistics?

14 A. Entirely.

15 Q. Did you prepare a demonstrative, just as a
16 starting place, that set forth the data sets that were
17 relied upon by Dr. Johnson in his report?

18 A. Yes, I did.

19 Q. Is that set forth at Tyson Defendants
20 Demonstrative 349?

21 A. Yes, it is.

22 Q. Okay.

23 MR. HOPSON: Can we see that, please?

24 Q. (BY MR. HOPSON) What does this show us?

25 And, again, I don't want to spend too much time or get

1 into too much detail, but I just want to have you
2 indicate what's reflected in this demonstrative.

3 A. This demonstrative shows the data sets that
4 were available to Dr. Johnson that he evaluated. And
5 it's particularly -- I want to make one thing very
6 clear. Anytime you evaluate data and you do a
7 statistical analysis because you're trying to draw
8 inferences, the question is for what purpose?

9 His stated purpose is to infer what is the
10 distribution of STPs within the IRW. That's the
11 purpose. So anytime we evaluate whether this is the
12 best available data, is this data efficient, is it the
13 only data that's available, it must be evaluated in
14 the context of the purpose.

15 Now, what I did is I looked at these data
16 sets and I looked and reviewed his report, his
17 deposition testimony, and his trial testimony with
18 regard to the stated purpose.

19 Q. Okay. And to what extent, sir, based upon
20 your work in statistics, is understanding the source
21 of data part of a statistical analysis?

22 A. It's critical. You have to know how the data
23 was collected. Were there measurement errors in the
24 data? Is the data stratified and representative of
25 the population for which you're attempting to draw

1 inferences given your stated purpose? All of those
2 factors must be taken into account.

3 Q. Okay. And is evaluation of sampling design
4 and data-gathering also part of a statistical
5 analysis?

6 A. No. It's crucial.

7 Q. Let me ask you this: Just so the record's
8 clear, Dr. Johnson didn't actually rely on all of this
9 data in providing the opinions he offered in the
10 courtroom; is that correct?

11 A. That is correct.

12 Q. Can you just tell us, just so we have a
13 starting point, what data sets he did rely upon?

14 A. Yes. If you look at this Exhibit 349, he
15 focused on 3 and 4. That is the data that he reported
16 in his trial testimony.

17 Q. Okay. Well, let's start with an analysis of
18 the data itself.

19 Were you able to discern based on the trial
20 testimony, considered materials, and report how the
21 data relied upon by Dr. Johnson were, in fact,
22 collected?

23 A. Yes. There was -- with regard to those two
24 data sets that you just asked me about?

25 Q. Yes, yes.

1 A. Yes. These were actual soil samples that
2 were collected by growers, submitted to the University
3 of Arkansas and/or Oklahoma State University to run
4 tests on that particular data or samples.

5 Q. Okay. Does that fact, as you've just
6 described it, speak in any way to the reliability,
7 consistency, or representativeness of those samples?

8 A. No. Because anytime that you're collecting
9 data, soil samples or any other data, that is
10 distinguishable from one sample to another -- that is
11 to say it comes from a different size of the field, it
12 comes from a different soil depth, it comes from a
13 different topology, it comes from a different set of
14 conditions with regard to litter applications, one
15 field has litter applications, another field does
16 not -- all of those factors make the individual
17 readings, STP readings, distinguishable and you have
18 to adjust for those factors to make them comparable.

19 Q. Well, what methodologies, if any, would be
20 followed by a statistician in working with a
21 statistical analysis of data such as you've just
22 described?

23 A. Ideally, what you would do is you would
24 characterize the complete population; that is to say
25 the entire land area within the IRW. You would

1 stratify it in accordance with litter applications,
2 degree of litter applications. You would stratify it
3 with regard to topology. You would stratify it with
4 respect to where regulations are being imposed versus
5 where they're not. You would stratify it with regard
6 to the protocol for different soil depths of the
7 samples taken.

8 Then you would select a random sample from
9 each one of those strata, and the sample that you
10 would take in terms of each strata would be
11 proportional to that strata relative to the total
12 population.

13 Q. To what extent, if any, have you evaluated
14 the representativeness of the samples that were used
15 by Dr. Johnson?

16 A. Dr. Johnson himself in his deposition
17 testimony recognizes that the data that he had is not
18 representative of the entire IRW. I've evaluated the
19 representativeness to the extent that it can be done.
20 The readings themselves don't give you details with
21 regard to the size of the field from which the sample
22 was taken. As a result, if there's any bias at all
23 with regard to fields or land areas, it is bias with
24 regard to those fields for which there are litter
25 applications.

1 Q. And why is that, Doctor?

2 A. In large part, because of nutrient plan
3 requirements that have come through regulations over
4 the course of the last decade, those kinds of samples
5 are required for those nutrient plans.

6 Q. Okay. So the people who are taking those
7 samples are people who apply litter?

8 A. Generally speaking, yes.

9 Q. You mentioned a moment ago the size of the
10 field. Why would the size of the field on which
11 samples are taken be relevant to a statistical
12 analysis of average STP levels?

13 A. Because if I'm taking a sample on a 300-acre
14 farm, that sample is -- the attempt is to use that
15 sample as being representative for 300 acres. Suppose
16 I take another sample and it's only two acres. The
17 weighting of those two particular samples should be
18 dramatically different.

19 In this particular case, Dr. Johnson didn't
20 have the data with regard to the size of the field so
21 he couldn't make any adjustments associated with size.
22 However, if you're going to serve the purpose for
23 which he was doing his analysis and you want
24 representativeness, you should know the size of the
25 field from which the samples were drawn.

1 Q. Okay. So did Dr. Johnson do any weighting at
2 all of the data he used to compute his average?

3 A. No. Not to my knowledge, no.

4 Q. Did you review the statistical techniques
5 applied by Dr. Johnson to the data set we've just
6 discussed?

7 A. Yes, I have.

8 Q. Okay. What, if any, observations did you
9 make about the statistical techniques that were used
10 in providing this average?

11 A. Yes. I've prepared a demonstrative that goes
12 to my assessment.

13 Q. Okay. Let's look at those one at a time.

14 First, let me ask you to just pull out of the
15 pile and look at, before we display, Defendants' Joint
16 Exhibit 3125. Do you have that in front of you?

17 A. I do.

18 Q. And without describing it further, can you
19 just tell me, is this a figure or a chart that's
20 contained in your report?

21 A. It is.

22 Q. And did you prepare this from data provided
23 to Dr. -- used by Dr. Johnson? I'm sorry.

24 A. Yes, I did.

25 MR. HOPSON: Okay. Your Honor, at this

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1 time I would move the admission of Defendants' Joint
2 Exhibit 3125.

3 MR. GARREN: No objection.

4 THE COURT: 3125 is admitted.

5 Q. (BY MR. HOPSON) Okay. Let's take a look at
6 3125. Why don't you begin by telling us what data is
7 displayed on this diagram.

8 A. This data covers the two counties, Benton and
9 Washington County, and it covers the years 2005
10 through 2007 and it's all the individual observations.
11 If you look at the horizontal axis here, the
12 horizontal axis reports the STP readings of the
13 samples. That's what along the horizontal axis.
14 What's on the vertical axis is the number of
15 observations at that reading.

16 And the only distinguishable information that
17 you have with regard to this -- these STP readings or
18 samples is the county from which they were taken as
19 well as the year in some cases or the specific date in
20 other cases.

21 Q. Okay. And what did Dr. Johnson conclude or
22 testify to based on his analysis of these individual
23 STP readings?

24 A. He concluded that the measure of central
25 tendency was an STP reading or an average -- simple

1 average of 402.

2 Q. Okay. Can you tell us whether, or to what
3 extent, you believe the data represented on this
4 Defendants' Joint Exhibit 3125 is skewed?

5 A. Yes, it is skewed. There's no question about
6 it.

7 Q. All right. Describe what you mean when you
8 say the data is skewed.

9 A. What it means is the underlying probability
10 distribution for the sample itself is skewed in one
11 direction. In this case, it's skewed to the higher
12 values. You could have it skewed to the left as well,
13 which means it's not a symmetric distribution or it's
14 not a normal probability distribution.

15 What it also means is that the average -- the
16 simple average is going to give you a false signal
17 about what the central tendency is. Why is it a false
18 signal?

19 Q. You took my question.

20 A. Okay. Fair enough.

21 Q. Why is it a false signal?

22 A. Because when you compute the simple average,
23 you give every observation a weighting in terms of its
24 size, and its size is along the horizontal axis here.
25 So if you have a very large reading, which in this

1 chart you'll see that there's some readings that go as
2 high as 1500, for example, well, that is going to be
3 used in the averaging process and it's going to draw
4 the mean to the right in the direction in which the
5 probability distribution is skewed.

6 Q. Okay. You have a red line that I see over
7 there to the right that says "outliers." What is that
8 about?

9 A. Outliers is a standard statistical
10 methodology with regard to eliminating some of the
11 observations because there are measurement errors.
12 There are measurement errors that take place when
13 you're collecting data and summarizing the data, and
14 there are lots of different mechanisms for determining
15 outliers.

16 The simplest one is simply to eliminate the
17 extreme values. One way of doing that is to
18 eliminate, say, the very extreme tails of the
19 probability distribution. What I've labeled here as
20 outliers are those that are above 99 percent -- 99 and
21 a half percent approximately on both ends of the
22 distribution.

23 Q. And are those type of outlier techniques
24 sometimes referred to in terms of standard deviations?

25 A. Yes. That's one methodology that's out there

1 is to look at the standard deviation and do your
2 analysis based on all of the observations that fall,
3 both plus three standard deviations from the mean and
4 less than three standard deviations from the mean, and
5 drop the other extreme values on both ends.

6 Q. When you undertook to calculate the mode and
7 the median, did you do an outlier technique such as
8 you've just described?

9 A. Yes.

10 Q. Did you do it at the low end as well as the
11 high end?

12 A. Yes, I have. Yes, I did.

13 Q. Okay. And based upon that analysis -- is
14 that a standard statistical analysis?

15 A. Yes. There are other methodologies for
16 detecting outliers as well but that's the simplest,
17 yes.

18 Q. Okay. What do you think among the mode,
19 median, and mean best represents the central tendency
20 or better represents the central tendency of this
21 data?

22 A. For this particular data, a much better
23 measure of central tendency is the median and/or the
24 mode, and that is because the distribution is not
25 normal. If it was a normal distribution, the median

1 and the average, the simple average, would be
2 precisely the same.

3 Q. Be a bell curve?

4 A. Yes. And they're not here in large part
5 because of the skewness to the right dragging the
6 simple average upward.

7 Q. Did you prepare a similar analysis for data
8 relating to the four counties in Oklahoma?

9 A. Yes, I did.

10 Q. Okay. Is that set forth in Tyson Defendants
11 Demonstrative 352?

12 A. It is.

13 Q. And is it exactly the same thing with
14 different data set?

15 A. The same computations, yes.

16 Q. Okay. Now, what year's data is this based
17 on?

18 A. This particular chart is based on my report
19 with Dr. Dicks and it's for the year 2007.

20 Q. And to be clear, when Dr. Johnson testified
21 in the courtroom and presented his data, he didn't use
22 '07 data, did he?

23 A. No. My recollection is he used 2004 through
24 2007.

25 Q. Okay. What did he calculate as the mean

1 using '04, '05, '06, and '07 data?

2 A. It was below the mean that I've reported here
3 for 2007. For 2007, it's 107. My recollection for
4 the full data set that he used, it was around 102 or
5 so.

6 Q. Why did you prepare a demonstrative with only
7 '07 data rather than '04 through '07 data?

8 A. Because I was informed by counsel that I had
9 to use what was included in my report with Dr. Dicks.

10 Q. Okay.

11 A. And I did not include an analysis of 2004
12 through 2007, only 2007.

13 Q. All right. Well, let's walk through this
14 quickly then.

15 Did you apply the same type of outlier
16 analysis for this Oklahoma data?

17 A. Yes, I did.

18 Q. And did you engage in the same type of
19 calculation of mode, median, and mean?

20 A. Yes, I did.

21 Q. And, again, which of these numbers, in your
22 opinion, represents a best or better representation of
23 the central tendency of this data?

24 A. Once again, given the skewness of the
25 underlying probability distribution for the sample --

1 for the sample -- not the population but for the
2 sample -- a median is a far better measure.

3 THE COURT: Doctor, on both of these,
4 the Joint Exhibit 3125, which was admitted, and this
5 demonstrative, it indicates that the outliers were
6 removed on the top end but no indication that outliers
7 were removed on the bottom end.

8 THE WITNESS: No. But we did it on both
9 sides.

10 THE COURT: All right.

11 THE WITNESS: We did it on both sides,
12 yeah.

13 Q. (BY MR. HOPSON) Is that just because it's
14 hard to get a line in there with those very low
15 numbers?

16 A. Yes, yes. It's right at zero, yes.

17 Q. And were there actually some numbers that
18 were reported that were negative?

19 A. Yes. But not for these two data analyses
20 that Dr. Johnson used.

21 Q. Okay.

22 A. But there were some negative values, and
23 there were some outrageously absurd values that were
24 very large, 3,000, 5,000. I don't recall the actual
25 number. But those were not included in Dr. Johnson's

1 analysis and testimony in this court.

2 Q. In your application of these statistical
3 techniques in Demonstrative 352 and 3125, does that
4 address the other issues about representativeness and
5 bias and the other things you discussed at the outset
6 of your testimony?

7 A. It does not.

8 Q. Is it just the best you can do with this
9 data?

10 A. With regard to reporting central tendency.
11 But I don't believe you can use this data to draw
12 inferences about the entire IRW with regard to STP
13 levels.

14 Q. Okay.

15 MR. HOPSON: That's all I have, Your
16 Honor. Thank you, Dr. Rausser.

17 THE COURT: Doesn't the central tendency
18 itself allow one to draw inferences about the entire
19 IRW?

20 THE WITNESS: If you had a
21 representative random sample, yes.

22 THE COURT: All right.

23 THE WITNESS: Yes. But it can only tell
24 you what the location parameter is for the probability
25 distribution. And because the samples that were

1 available to Dr. Johnson were very biased, you
2 can't -- you shouldn't even use the central
3 tendency -- any central tendency measures based on the
4 sample data that was available to him to draw
5 inferences for the entire IRW.

6 THE COURT: All right. But let's assume
7 for the purposes of a hypothesis that -- or a
8 hypothetical that only those lands on which poultry
9 litter is applied is relevant here, with the
10 assumption that if we're going to focus on the
11 application of poultry litter that the other areas --
12 and I know that may be to a certain extent an
13 unrealistic assumption -- but assuming that that was a
14 proper hypothesis, then the central tendency would
15 allow you to draw inferences about the entire IRW at
16 least with respect to the effect of the application of
17 poultry litter; correct?

18 THE WITNESS: But then you have a
19 problem. Suppose you collected given your
20 hypothetical -- if I could elaborate on the
21 hypothetical -- supposed you collected all of your
22 samples for only those land areas where there's litter
23 application, all right? Now, you take that and you
24 say, now, with respect to the entire IRW, my mean STP
25 is 110. Let's take --

1 THE COURT: As to those lands onto which
2 poultry litter has been applied?

3 THE WITNESS: Right, right. But now the
4 question is, can I redistribute that litter to the
5 land for which it's not applied and still achieve the
6 maximum productivity with regard to the needed
7 phosphorus nutrients for the entire IRW?

8 Any inferences that you draw -- if you only
9 care about drawing inferences with regard to the land
10 at which litter is being applied, then only draw
11 inferences on that, don't try to infer that it's for
12 the entire IRW. If you don't have any data for the
13 nonlitter-applied land, you can't draw inferences for
14 that land --

15 THE COURT: But you're assuming that
16 those -- the lands on which poultry litter has been
17 overapplied and that poultry litter can be
18 redistributed on other lands --

19 THE WITNESS: Yes.

20 THE COURT: -- right?

21 But to the extent -- and you probably have
22 read enough here -- that it is uneconomical to
23 transport this beyond a certain distance --

24 THE WITNESS: Distance.

25 THE COURT: -- then it may be

1 unreasonable to assume that one could redistribute to
2 other lands at the far reaches away from poultry
3 houses?

4 THE WITNESS: Still within the IRW?

5 THE COURT: Yes.

6 THE WITNESS: That could -- that's very
7 possible. But then that, in turn, depends on the
8 price of substitutable chemical fertilizer. And given
9 those prices have gone up, that economic distance that
10 you refer to in your hypothetical is now changed
11 dramatically.

12 THE COURT: All right. Mr. Garren.

13 MR. GARREN: Before we start -- and I
14 really want to jump into this conversation because
15 you've jumped into the heart of my questions -- but,
16 Your Honor, originally Dr. Dicks was noticed to us for
17 testimony in this case. That's been changed. I was
18 informed informally that perhaps he's not available in
19 January.

20 Based on the announcement today, which is the
21 first time we've heard this, that Dr. Rausser's
22 testifying and he's limited to basically two sections
23 of a seven-section report, I must inquire because I
24 think we're prejudiced in not knowing is, are we
25 limited just to Dr. Rausser and there will be no

1 Dr. Dicks coming? Because there are some overlap, and
2 Dr. Dicks has testified that they worked together on
3 parts of this and some parts Dr. Dicks couldn't
4 remember whether he did it or not.

5 So I think we're entitled to know that and
6 what the position is. I have an outline here that I
7 tried to chop it down from Dr. Dicks and fit it now to
8 Dr. Rausser.

9 THE COURT: I think that's a fair,
10 pragmatic, practical question.

11 MR. ELROD: Your Honor, we intend that
12 Dr. Dicks will testify next week. That's our
13 intention at this point in time. But, you know, what
14 happens in terms of our 72-hour disclosure obligation
15 is a moving target in terms of our internal
16 discussions. I'm not playing games with Mr. Garren at
17 all, but it's our intention that he will be here next
18 week --

19 THE COURT: Well, but we don't want
20 Dr. Rausser to get out of hand and then Mr. Garren
21 will have lost his opportunity to ask questions as to
22 which Dr. Dicks then disclaims any responsibility or
23 primary responsibility. Am I understanding that?

24 MR. GARREN: That can be a problem, Your
25 Honor. There's some overlap as to who actually did

1 the work. My understanding from Dr. Dicks' testimony
2 is that most of all the calculations were done in
3 Dr. Rausser's facilities and by his staff and those
4 matters were used by Dr. Dicks.

5 THE COURT: Well, practically Dicks is
6 only going to testify as to that which he is qualified
7 to testify to, and to the extent that they've limited
8 Dr. Rausser's testimony, do we really have a problem
9 here? I mean, you simply just cross-examine him on
10 the areas in which he's provided direct testimony;
11 correct?

12 MR. HOPSON: I was going to say, isn't
13 this governed by the scope of direct? I don't know
14 what confusion there would be here.

15 THE COURT: I think pragmatically isn't
16 that the answer?

17 MR. GARREN: Well, that can be. But I
18 didn't want to be in that switch where I'm the cock in
19 the badminton game and now that Dr. Rausser is gone,
20 Dr. Dicks says, well, you know, I'm really -- I don't
21 have any knowledge about that. There's overlap.

22 THE COURT: Well then, he won't be able
23 to testify on it.

24 MR. HOPSON: Right.

25 THE COURT: And you'll be able to

1 cross-examine as to whatever Dicks testifies on.

2 MR. MCDANIEL: And, Your Honor, this
3 doesn't vary at all from the situation we had during
4 plaintiff's case, where both Drs. Cooke and Welch
5 submitted a joint report. We simply had to try to
6 cover the waterfront, listen to the direct, and do a
7 cross that fit the direct. That's the same situation
8 that the plaintiffs are now in.

9 THE COURT: All right. I think that
10 answers the question.

11 Go ahead. Cross-examination.

12 **CROSS-EXAMINATION**

13 **BY MR. GARREN:**

14 Q. Welcome to Oklahoma, Dr. Rausser.

15 A. Thank you.

16 Q. In quick follow-up to some questions and
17 comments you were making to His Honor, it's possible
18 in the -- let me define some things.

19 Population is all of the samples, correct, in
20 your terminology?

21 A. No.

22 Q. Population then is what in relation to
23 samples?

24 A. Population is the entire land area of the
25 IRW. So that is the population.

1 Q. Okay.

2 A. A sample is, as the word suggests, a subset
3 of the population.

4 Q. Okay. So the judge pointed out to you that
5 the emphasis, or at least the focus, is on those lands
6 where land-applied poultry waste has occurred, and
7 then there is rather a few data sets -- several data
8 sets on that information. You agree with that?

9 A. I do.

10 Q. And to that extent, there may be lands out
11 there that because of their prior levels of phosphorus
12 had not been tested for some time, and therefore,
13 would not be in that sample data set. Likewise, there
14 may be lands where there is no desire nor need to have
15 sampling occur because there will be no fertilization
16 either by poultry litter or commercial fertilization;
17 correct?

18 A. All of those things are possible. But can
19 you determine whether it's empirically relevant from
20 the actual data that Dr. Johnson used? And then the
21 answer is no, it cannot.

22 Q. But it does indicate, does it not, because
23 those facts are more likely true than not, that the --

24 MR. HOPSON: Objection. This assumes
25 facts in evidence, what's more likely true than not.

1 THE COURT: Rephrase, please.

2 Q. (BY MR. GARREN) In the form of a
3 hypothetical, assuming that those facts are true,
4 about the two different sets of fields that we use
5 discussed, that in a sense would create a larger
6 population available for that defined data set that
7 doesn't show up in the data; correct?

8 A. Yeah. I'm having trouble with your
9 terminology. It would create a larger sample for the
10 population of your interest.

11 Q. All right. But not all of it would have been
12 in the data?

13 A. That is correct.

14 Q. Okay. I'm going to have to skip around
15 because I've got an outline here with a lot of holes
16 in it anticipating something different than occurred
17 so bear with me. It may be a little bit disjointed
18 and I apologize in advance.

19 With regard to control and integrators as it
20 pertains to the growers, are you aware of a case we
21 commonly referred to as the Eucha-Spavinaw case, or
22 the *City of Tulsa* case, that occurred involving
23 poultry litters and these -- and most of these
24 integrator defendants?

25 A. At the very beginning of my engagement with

1 Dr. Dicks in this matter, we reviewed that -- this is
2 back in 2006 or so -- but it's not something that I
3 have reviewed for my testimony here in court today.

4 Q. Are you aware, sir, that the integrators in
5 that particular case and in that instance, in that
6 abutting or adjoining watershed, caused the land
7 application of waste to cease based upon certain of
8 all the growers?

9 MR. MCDANIEL: Objection. There's
10 nothing in the evidence --

11 MR. HOPSON: Objection.

12 THE COURT: All right. One at a time,
13 gentlemen. Mr. Hopson, you get --

14 MR. HOPSON: No. Go ahead.

15 MR. MCDANIEL: I said there's nothing in
16 evidence in this trial with regard to the City of
17 Tulsa settlement and what integrators did or didn't do
18 or what the agreement said or anything to do with the
19 contract growers.

20 THE COURT: Mr. Elrod.

21 MR. ELROD: I agree.

22 MR. HOPSON: I would also object it's
23 misleading, Your Honor, because what happened in the
24 settlement of that case involved negotiation and
25 consultation with growers as well.

1 THE COURT: All right. Response?

2 MR. GARREN: Your Honor, I think all I'm
3 trying to do is show whether or not this gentleman has
4 all of the basic information that would be helpful in
5 making a decision about the control issue. And, if,
6 in fact, in an adjoining watershed where similar
7 practices occurred, that, in fact, these growers were
8 required to stop, based upon certain conditions, the
9 application of poultry waste which were -- which arose
10 out of this settlement. I don't care about the
11 details of the settlement. That might have something
12 to do with the element of control.

13 THE COURT: Well, except the growers
14 were involved in that agreement; correct?

15 MR. GARREN: Well, they weren't a party
16 to the lawsuit, Your Honor. So if they can be a party
17 to a settlement, I find that a little hard to believe.

18 THE COURT: Well, I've not reviewed the
19 terms of the settlement, but it's my understanding
20 that the growers were involved to the extent that
21 poultry litter was ceased or limited; correct?

22 MR. GARREN: It's my understanding that
23 they were not a signatory to anything, but in fact
24 they were told that the order is that there should be
25 not land application pursuant to these requirements.

1 THE COURT: All right. We're going to
2 have to get into this. Mr. McDaniel.

3 MR. MCDANIEL: Your Honor, this is the
4 reason that I objected. There's no evidence here.
5 Mr. Garren is expressing his belief. You know, the
6 court obviously has had -- wasn't involved in the case
7 so you had to pick up what you could.

8 THE COURT: No. Right.

9 MR. MCDANIEL: And the fact of the
10 matter is the -- to the extent each of the companies
11 had interactions were growers relevant to that
12 settlement, no one's testified about that.

13 THE COURT: It's not part of the
14 evidence in this case. The objections are sustained.
15 Go ahead.

16 Q. (BY MR. GARREN) Would it be unusual to get a
17 hundred-percent agreement of all growers with regard
18 to their control or disposition of poultry waste in
19 your opinion? You're looking over at my shoulder.
20 Are people standing behind me --

21 A. No, no, no. I'm not looking over your
22 shoulder. I'm looking at the ceiling in large part
23 because I want guidance from God to answer your
24 question.

25 It's unimaginable that a hundred percent of

1 farmers or growers could agree on anything.

2 Q. Thank you. Now --

3 THE COURT: How about lawyers?

4 MR. RIGGS: How about economists?

5 Q. (BY MR. GARREN) Did you, sir, in preparation
6 for your case -- or in this case have any personal
7 conversations with any growers in the IRW?

8 A. I did not.

9 Q. Do you know how many active integrators there
10 are currently in the IRW?

11 A. I know how many were active when I began the
12 case.

13 Q. How many was that?

14 A. There was more than seven. I don't recall
15 the exact number, but there were certainly more than
16 seven.

17 Q. Do you know whether or not they were all
18 chicken-growers or a combination?

19 A. Combination.

20 Q. And do you know how many chicken-growers
21 there are, integrators?

22 A. How many --

23 Q. Chicken integrators.

24 A. Integrators?

25 Q. Integrators.

1 A. Integrators. Just chicken by poultry
2 integrators?

3 Q. Yes, sir. Not turkey, not --

4 A. Yeah, I understand. I understand the
5 question.

6 Yes. My recollection with regard to the
7 location of feed mills, hatcheries, and processing
8 facilities, there is now at least five.

9 Q. Are you aware of a takeover or a purchase of
10 Simmons and Peterson?

11 A. Yes.

12 Q. Okay. Now, with regard to this concept that
13 protein has become inexpensive or cheap, you have a
14 chart, I believe, that you addressed --

15 A. Right.

16 Q. -- and talking about how poultry has grown
17 and beef has not on that chart. Do you recall that
18 chart?

19 A. I do.

20 Q. Isn't it true that what we're talking about
21 there is the production of protein, correct, when
22 you're comparing pork, beef, and poultry?

23 A. You're talking about more than that. There
24 are a number of studies that focus on just protein,
25 but you're also talking about the substitutability in

1 terms of cross-price elasticities between poultry,
2 beef, and pork. There have been a number of studies,
3 and they are all considered by the entire universe, or
4 at least a subset of the universe, of consumers with
5 regard to their purchasing patterns.

6 Q. Is the beef industry integrated, vertically
7 integrated?

8 A. No.

9 Q. Okay. The last time I went to the grocery
10 store, I could get all kinds of cuts of meat, just
11 kind of like in a chicken. In fact, there's probably
12 more cuts of beef in a cow because they're bigger.

13 Would you agree?

14 A. Naturally, yes.

15 Q. So there's a lot of choices in that industry,
16 too, without being vertically integrated; correct?

17 A. Yes, there is.

18 Q. As a result of the poultry industry demanding
19 quality controls, in particular on the growing
20 process, in order to have a good product, that has an
21 effect, does it not, on in return having some control
22 over that product?

23 A. And providing the incentives for that control
24 to be exercised by the grower in terms of his or her
25 management of those flocks, yes.

1 Q. But there is -- there is a necessity of
2 control on the part of the integrator in order to have
3 that quality control that you talked about; correct?

4 A. Well, I wouldn't characterize it so much as
5 control, but incentives that are put in place and the
6 fact that the integrator actually owns the birds.

7 Q. Doesn't incentives in the form of maybe money
8 for a lot of people give direction and control for
9 those people?

10 A. Gives direction. Control depends upon the
11 ultimate discretion that each of the parties to a
12 contract have.

13 Q. And the way the incentives are structured;
14 correct?

15 A. Correct.

16 Q. Now, we talked about exports and the effect
17 of supply as it relates to oligopsony power.

18 What is the geographic area that you're
19 applying for your opinions as to the oligopsony power
20 that you say doesn't exist in this case?

21 A. I'm not coming -- I haven't offered any
22 opinions about the geographic scope of the relevant
23 market, as you well know.

24 Q. Isn't that important?

25 A. If I was doing the analysis that Dr. Taylor

1 indicated he was doing, yes.

2 Q. What is the perspective being used in order
3 to determine that power exists or not? Is it from the
4 integrator or is it from the grower?

5 A. Oh, it's from the integrator. If you're
6 looking at monopsonistic or oligopsonistic power, it
7 is power that's being exercised by the buyer, by the
8 purchaser, under the contractual relationship with the
9 grower.

10 Q. Well, in this case, they already own the
11 birds so they're not buying anything, are they --

12 A. Oh, yes.

13 Q. -- they're just paying for a service?

14 A. They're paying for a service, yes, indeed.

15 Q. All right.

16 A. And they're buying that service.

17 Q. Now, you haven't spoken to any
18 integrator -- I'm sorry -- any growers in the IRW.

19 Would it surprise you to learn that all that
20 have testified here in trial have said that they were
21 not able to negotiate the terms of their contract?

22 A. It would not surprise me. I read that
23 testimony.

24 Q. Okay.

25 A. I didn't talk to any of those growers. But

1 no, that doesn't surprise me at all.

2 Q. And a few of them even described it as you
3 either sign it or you don't, it's a
4 take-it-or-leave-it contract; correct?

5 A. Yes.

6 Q. You talked a little bit about to expect the
7 standardized contract there are three things that you
8 discuss, and one of them is pricing, who shares the
9 risk, and the quality control.

10 In that regard, what did you do to compare
11 the pricing with regard to whether or not these
12 contracts are standardized in the IRW?

13 A. I'm sorry. What did I do that --

14 Q. Yes, sir. Did you look at IRW contracts that
15 are of recent vintage?

16 A. No, I did not. I evaluated Dr. Taylor's
17 analysis and determined that the conclusions that he
18 reached are not supported by the analysis that he
19 conducted.

20 Q. You mentioned one other element of this
21 standardized contract issues, that it's who shares the
22 risk. Can you identify what that risk is and the IRW
23 contract that creates that?

24 A. Yes. As I indicated, and as the economic
25 research service has documented, the risk that is held

1 in the hands of the integrator is the price of the
2 inherent value of the broiler or the eggs or the
3 turkey meat that comes out of the grower process.

4 Moreover, they take the risk with regard to
5 feed --

6 Q. Let me stop you.

7 A. -- the cost of feed.

8 Q. Can I stop you? Maybe I'm not very clear and
9 maybe I didn't understand completely what you said
10 earlier.

11 Weren't you talking about that you expect
12 there to be a standardized contract in order for this
13 power to exist? Isn't that what I heard you say?

14 A. No, no.

15 Q. That isn't?

16 A. No, it is not.

17 Q. Let's move on then.

18 A. Do you want me to clarify?

19 Q. No. I just want to make sure. I'm trying to
20 understand correctly what I thought you said.

21 A. No.

22 Q. All right. Now, you talked about the Simmons
23 situation where you said there was a hundred houses
24 that changed hands.

25 Are you familiar with the reasons for which

1 that occurred?

2 A. Yes. I think it's specified in the
3 declaration that it calls for a change associated with
4 additional requirements for quality control of the
5 birds themselves.

6 Q. There was a major upgrade required for many
7 houses in order to continue growing for that
8 integrator; correct?

9 A. Ventilation, as I recall.

10 Q. And if they didn't conform to those
11 specifications, Simmons wasn't going to renew them
12 anyway; isn't that your understanding?

13 A. Yes. But --

14 Q. All right.

15 A. -- as a result, they had the opportunity,
16 other options, to move in a different direction and
17 not be subjected to any power or control on the part
18 of that integrator.

19 Q. Did you evaluate whether or not they were
20 paid more or less as a result of that switch from one
21 integrator to the next?

22 A. I did not.

23 Q. You made the comment that the growers have
24 the opportunity to switch even to another enterprise.
25 What is your basis for that statement?

1 A. Well, to the extent that the growers that
2 have testified in this court were selected by the
3 plaintiffs and to the extent that they're
4 representative -- I have not done that
5 evaluation -- but assuming they are representative,
6 there was one grower that terminated his activities as
7 a poultry-grower and became a transporter and marketer
8 of litter. That's an indication of other enterprises
9 that were available that have more economic value to
10 that particular grower.

11 Now, that's one grower, but there are only a
12 few growers that testified. But if those growers are
13 representative, then that's an indication of other
14 opportunities that exist with regard to enterprises
15 that these growers can avail themselves of.

16 Q. And, in fact, sir, Mr. Collins testified that
17 he changed enterprises because he did not want to
18 elect to spend tens of thousands or maybe more dollars
19 on old barns, but instead he invested a half a million
20 dollars in trucks. Were you aware of that?

21 A. Yes. No.

22 Q. Okay.

23 A. That's in his testimony.

24 THE COURT: To the extent a grower has a
25 long-term financial obligation on an existing barn or

1 barns, how is switching substantively meaningful if,
2 in fact, the prices for services provided are
3 essentially the same?

4 THE WITNESS: Well, obviously if a
5 grower's made a commitment in terms of long-term
6 financing, the counterparty to that long-run financing
7 is going to look to the contract that that grower has
8 with an integrator, right, but that bank is also going
9 to look to what other sources of income are available
10 to service that debt, not just the houses. The
11 cow-cattle operation, the employment of a spouse in
12 another economic activity, all of those factors are
13 going to be taken into account. It's not just the
14 houses. They're not locked in.

15 In fact, if it's a small-scale operator, that
16 doesn't require full-time on the part of the manager
17 of that growing operation providing those services.
18 If it's a small operation, they will have available
19 time to be gainfully employed as a part-time worker in
20 some other economic activity.

21 It is true, as your question suggests, that
22 once I make these commitments, I am locked in --

23 THE COURT: And have little bargaining
24 power in terms of demanding increased pricing?

25 THE WITNESS: Correct. But now the

1 question is, is it in the interest -- the economic
2 interest of the integrator to exercise that power?
3 This is referred to in the economic literature as
4 hold-up.

5 Once you get the grower locked in to the
6 investment and having external financing, you can
7 suddenly exercise some power over that grower because
8 he or she are locked in because of their external
9 commitments beyond the contract, another contract with
10 regard to a financier.

11 But now, what is the economic incentive? If
12 I've got good growers that are providing very
13 effective management skills, it's not in my economic
14 interest to harm them because I want that volume, I
15 need that throughput because I've got to manage my
16 economics downstream as well.

17 THE COURT: Well, I understand you may
18 not want to hold them up and further bleed them dry,
19 but your incentive -- you're not going to have an
20 incentive to share the increased potential upside?

21 THE WITNESS: I believe there is for the
22 following reason.

23 The market's expanding, it's expanding both
24 domestically and it's expanding globally in terms of
25 the export market. You want new entrants to come into

1 those growing operations, you, the integrator.

2 Now, if you take advantage of your existing
3 growers, you don't think that information is going to
4 become available to all other potential entrants? A
5 young couple coming along and they got a cow-calf
6 operation and they're thinking about also entering
7 into the poultry-growing business, if there's
8 information floating around -- and by the way, if you
9 spent any time in the farming community, there's lots
10 of rumors half of which is true and half of which is
11 story-telling; right?

12 But once that information gets out, that has
13 a very chilling effect on new entrants. That's not in
14 the interest of the integrators. It's not in their
15 interest.

16 THE COURT: Mr. Garren.

17 Q. (BY MR. GARREN) That grower may not
18 understand that, though, when they decide to sign on
19 the line and get poultry houses; correct?

20 A. Incorrect.

21 MR. ELROD: I object, Your Honor. That
22 calls for speculation. I object. It calls for
23 speculation.

24 THE COURT: Overruled.

25 A. No. Never underestimate the understanding of

1 the inherent economics by a farmer. Don't
2 underestimate.

3 Q. (BY MR. GARREN) I'm not doing that, sir.
4 Because they believe they can make money, don't
5 they?

6 A. Certainly.

7 Q. And in many instances, they're not making
8 money; correct?

9 A. In most instances, those that are efficient
10 are making money.

11 Q. Okay. And you weren't at Dr. Dicks'
12 deposition, but, in fact, some of the scenarios you
13 ran with the IMPLAN model that you and Dr. Dicks
14 employed in this case actually show that the beef
15 industry is losing money in the IRW; is that not
16 true?

17 MR. EHRLICH: Objection. Beyond the
18 scope.

19 THE COURT: Sustained.

20 Q. (BY MR. GARREN) Did you participate in the
21 IMPLAN model, sir?

22 A. Yes, as you well know.

23 Q. And was that part of the basis of your
24 opinion in this case, relying on the IMPLAN model, or
25 was that Dr. Dicks' solely?

1 A. No.

2 MR. HOPSON: Your Honor, that's
3 misleading. The question is whether it's part of his
4 opinion that he offered in the courtroom today, not in
5 the case.

6 THE COURT: Sustained.

7 Q. (BY MR. GARREN) All right. You're not
8 offering any opinions then today that phosphorus can
9 be added to the soils of the IRW; is that correct?

10 A. I'm sorry. Say that again.

11 Q. Are you offering any opinion that phosphorus
12 can, in fact, be added to the soils in the IRW?

13 A. I'm not offering an opinion, or I am offering
14 an opinion?

15 Q. I'm asking either way. Are you offering such
16 an opinion, that phosphorus can be added to the soils
17 in the IRW?

18 A. There was nothing in my direct testimony that
19 went to whether phosphorus can be added or not added.

20 Q. Okay. And part of it is, I've read your
21 report and I'm dealing in some instances with a report
22 that has other statements in it that kind of
23 intertwine with even the charts we saw here today. So
24 I just want to make the record clear.

25 You're not saying that we should add

1 phosphorus to the IRW; correct?

2 A. I am not.

3 Q. Okay. Did you make any survey, sir, of the
4 landowners in the IRW about whether they want poultry
5 waste to be applied to their lands? Did you attempt
6 to quantify the demand for poultry litter to be
7 applied on lands in the IRW?

8 A. Not in my direct testimony today, no.

9 Q. And I'm asking you didn't do such a study; is
10 that correct?

11 MR. HOPSON: Well, objection, Your
12 Honor. If he didn't testify today in the courtroom,
13 it's not relevant whether he did a study or not.

14 THE COURT: All right. Sustained.

15 Q. (BY MR. GARREN) Would knowing that fact make
16 any difference with regard to the statistical
17 application you applied to Dr. Johnson's testimony or
18 his information concerning the STP values?

19 A. No.

20 Q. And that's because it's purely statistical;
21 correct?

22 A. Correct.

23 Q. And, in fact, it has nothing to do with the
24 environment, it's all to do with the statistics;
25 correct?

1 A. Can you be more precise with regard to your
2 use of the word "environment"?

3 Q. In this case, the water quality in the IRW
4 specifically.

5 A. Correct.

6 Q. All right. You're not providing any
7 testimony with regard to the significant economic
8 benefits to cattle operators, are you?

9 A. In my direct testimony, no.

10 Q. No. All right. Do you know whether or not
11 Dr. Dicks intends to testify on that subject?

12 MR. HOPSON: Objection. It's an
13 improper question.

14 THE COURT: Sustained.

15 MR. GARREN: I've got to have a little
16 basis, Judge.

17 THE COURT: I understand.

18 MR. GARREN: I apologize.

19 Q. (BY MR. GARREN) As a resource economist,
20 sir, is it important to take into consideration the
21 impact agricultural practices will have on other
22 resources such as water quality?

23 A. In a general equilibrium sense, yes.

24 Q. And that was not part of any of your
25 analyses, though, for this trial; correct?

1 MR. HOPSON: Objection, Your Honor.
2 It's either in the scope of the direct or not.
3 Whether the analysis is in his report is not relevant.

4 THE COURT: Well, I essentially asked
5 him the same question before.

6 THE WITNESS: Yeah, you did.

7 THE COURT: Go ahead. The objection's
8 sustained.

9 Q. (BY MR. GARREN) You have not received from
10 any of the integrator defendants operational or
11 financial data for your use in this case; is that
12 correct?

13 A. Yes.

14 Q. And as a result of the growth in the farm
15 size and the new technologies, do you agree that there
16 has been a significant increase in capital
17 requirements for the broiler growers?

18 A. When you say "significant," can you be more
19 precise?

20 Q. A large amount of money for growers that are
21 making \$45,000 a year maybe.

22 A. You're suggesting that this additional
23 investment is 45,000?

24 Q. No. I'm suggesting that's the level of their
25 income. And for them, what would be significant in

1 that context?

2 A. Well, you used the word "significant." I
3 want to be able to answer your question.

4 What's significant? Five thousand? Ten
5 thousand? Twenty thousand? What are we talking
6 about?

7 Q. From an economist standpoint, do you have an
8 opinion what would be significant to a \$45,000 income
9 having to making capital improvements to support
10 vertical integration of the poultry business?

11 MR. EHRICH: Your Honor, objection.
12 There's no evidence in the record as to \$45,000 or any
13 other number for an annual income of growers.

14 THE COURT: That's what he's seeking.
15 Overruled. Go ahead.

16 A. That's not an analysis that I've conducted.

17 Q. (BY MR. GARREN) Okay. You would agree,
18 though, that the growers have, for the most part, a
19 substantial investment in the broiler houses and
20 equipment required to grow the birds?

21 A. Yes.

22 Q. And the integrators benefit from that
23 investment made by the grower. Would you agree?

24 A. Yes. And the growers benefit from the risk
25 that's assumed by the integrator. They also benefit

1 by the integrator accepting and demanding a product
2 being produced by the grower. It's a symbiotic
3 relationship. There's benefits of the bargain.

4 MR. GARREN: To the extent that that
5 answer goes past my question, Your Honor, I ask that
6 it be stricken. I asked for what the integrator
7 benefited and that was the scope of the question.

8 THE COURT: Sustained.

9 Q. (BY MR. GARREN) Were you relying, sir, on
10 any of the farm budgets that were prepared as a part
11 of your work in this case to render opinions about the
12 farm and off-farm incomes that you gave today? Or
13 were you relying just basically on this national scope
14 of data that's reflected solely in that graph or that
15 chart?

16 A. Certainly national data, as you noted in your
17 question. But in the report itself, we also had --

18 Q. I'm trying to limit this because I've been
19 told to do it. So let's limit it to your testimony.

20 Are you relying on the farm budgets that you
21 did as part of your work in preparation for this case
22 in giving your opinions today about farm and nonfarm
23 incomes?

24 A. Yes. With regard to my opinion that in the
25 IRW more of the income is sourced with farm activities

1 than it is for the nation as a whole for all
2 farmers.

3 Q. And what was the basis of that -- the source
4 of the information on which you base that opinion?

5 A. Cooperative extension, bulletins with regard
6 to budgets, the work that was done at Oklahoma State
7 University with regard to budgets for different sizes
8 of poultry operations measured in terms of the number
9 of houses.

10 Q. Was that data gathered by Dr. Dicks for you
11 in order to make that observation?

12 A. Yes.

13 Q. You would agree, sir, based upon the Exhibit
14 3121, Defendants' Joint Exhibit, showing consumption
15 of beef and poultry, that the beef industry is
16 generally in a decline and has been since the mid
17 '70s?

18 A. In terms of per capita consumption, yes.

19 Q. And as a result of that, would that mean also
20 that production of beef has also gone down?

21 A. No.

22 Q. Why not?

23 A. Because this is per capita consumption. If
24 the population increases dramatically, which it has,
25 the total size of supply would still go up. You have

1 to look at both sides of the market before you can
2 draw such conclusions.

3 Q. Is this data in this chart on Defendants'
4 Exhibit 3121 limited to the United States?

5 A. Yes.

6 Q. Do you have an opinion whether or not the
7 beef industry is on a whole declining within the
8 United States?

9 A. Measured by per capita consumption, yes; but
10 measured by total supply, no.

11 THE COURT: It begs the question of the
12 economic impact of methane controls around feed lots,
13 but I won't go into that.

14 MR. GARREN: I have some questions on
15 that, Judge.

16 THE COURT: Are you kidding me?

17 MR. GARREN: No, I'm serious. It's
18 another reason for the decline.

19 Q. (BY MR. GARREN) Further regulation can cause
20 decline, can it not, Doctor?

21 A. Depends on the regulations. Is it possible?
22 Certainly. Depends on the empirical facts, however.

23 Q. I think we're just now developing them on
24 that issue.

25 Looking at Defendants' Exhibit 3125, the

1 Benton and Washington Counties STPs, did you look at
2 any other data besides the data that Dr. Johnson had
3 in his considered materials for your work in this
4 case?

5 A. No.

6 Q. Do you know if there are other data sets out
7 there for the IRW or parts of the IRW relating to STP
8 values than what you've testified to today?

9 A. Well, there's other data sources. I only
10 responded directly to Dr. Johnson's courtroom
11 testimony.

12 Q. That's my question. Are there other data
13 sources?

14 A. Well, we've listed those data sources, I
15 think, in another demonstrative; right?

16 Q. But you testified about those; correct?

17 A. I testified about the two that he testified
18 about.

19 Q. I'm sorry. You're right. But you listed
20 five sources, as I recall?

21 A. Yes.

22 Q. Did you analyze all five of those sources?

23 A. We certainly looked at it. But with regard
24 to the analysis in the report, we only included the
25 two which fortuitously were the only two that he

1 testified to here in court.

2 Q. Did you take all of the data and run it in a
3 manner that you felt was more statistically accurate,
4 reliable, and consistent in order to compare to the
5 opinion that Dr. Johnson gave in this case?

6 A. With regard to the signals about central
7 tendency, yes, I did.

8 Q. So you -- I'm sorry. So that I'm correct in
9 my understanding of your testimony, you took all of
10 the data sources that are listed in that -- I'm trying
11 to find that schedule here so we can talk about it.

12 A. It is schedule 349.

13 Q. Thank you. So of those five, did you take
14 all of that data -- let's limit it to the IRW because
15 we do have Eucha-Spavinaw listed there.

16 A. Yes.

17 Q. -- all of the IRW data and did you put it
18 together, analyze it to determine whether or not
19 Gordon Johnson's opinion would be any different, or
20 should be any different, as to the levels of STP that
21 are shown in the IRW?

22 A. Should be any different? That is to say any
23 different with regard to the simple average?

24 Q. That --

25 A. Can you be more specific?

1 Q. Well, we're going to break this down because
2 we're going to start there because that's what his
3 opinion was; correct? He talked about average?

4 A. Just simple average.

5 Q. Correct. And did you do an analysis to see
6 whether or not that other data would change or compare
7 differently in some way to Dr. Johnson's average?

8 MR. MCDANIEL: Excuse me, Your Honor. I
9 want to object because Mr. Garren is asking
10 Dr. Rausser if he has developed an opinion about data
11 that was not employed by Dr. Johnson in his direct.
12 So it's asking him to critique testimony that was not
13 offered on direct by Dr. Johnson. I think it's not
14 relevant. So I object.

15 MR. GARREN: Well, if I might --

16 THE COURT: Any response?

17 MR. GARREN: Yes, Your Honor. If you're
18 going to critique somebody, it seems consistent that
19 you, yourself, would test that data that's available
20 to you to determine if, in fact, Dr. Johnson's opinion
21 is wrong because other data is available.

22 MR. MCDANIEL: Well, Your Honor, he's
23 here to rebut Dr. Johnson. Dr. Johnson used two data
24 sets. Dr. Rausser has testified about those same two
25 data sets. Any other data is not relevant to either

1 Dr. Johnson or Dr. Rausser.

2 THE COURT: I believe that's right. I
3 think that's an essential component of the defensive
4 side of a lawsuit. It's not necessary that the
5 defense pose other alternative data sets that the
6 plaintiff ought to have chosen. It's up to the
7 defense to decide what the defense is.

8 So to the extent the doctor didn't consider
9 other data sets, that could have been a criticism but
10 it was not. So it's sustained.

11 MR. GARREN: It could be an issue of
12 reliability from the standpoint that I think from his
13 opinion he's questioning the reliability. If he's
14 questioning the reliability, he has other data that he
15 could look to to determine that it's either more
16 reliable or more complete. That would go to the
17 substance of his criticism and whether or not it, in
18 fact, is reliable or constructive to the issue.

19 THE COURT: To the extent it's not part
20 of this witness' criticism, the objection's
21 sustained.

22 MR. GARREN: All right. Thank you, Your
23 Honor.

24 Q. (BY MR. GARREN) Okay. Let's get back to
25 3125, I believe the histogram that you had and we

1 talked about earlier.

2 Do you know how many samples were a part of
3 this Exhibit 3125?

4 A. Yes.

5 Q. What was it?

6 A. 6,558. It's reported in this histogram.

7 Q. Can you tell me how many outliers, how many
8 values were eliminated by your drawing a line where
9 outliers should appear?

10 A. Not many. As you see to the right of the red
11 bar is the upper observations that were deleted, and
12 there were some observations deleted around zero. I
13 don't recall and didn't memorize the actual number.
14 It wasn't very many observations.

15 Q. Do you know how many observations there are
16 that exist below 65 STP in this data set?

17 A. It's computable. I haven't computed it. And
18 it's not possible off this histogram to do so.

19 Q. This histogram is prepared from an Excel
20 spreadsheet; correct?

21 A. Produced with our report, yes.

22 Q. Okay.

23 MR. GARREN: May I approach, Your Honor?

24 THE COURT: You may, sir.

25 *(Discussion held off the record)*

1 Q. (BY MR. GARREN) Dr. Rausser, I took the
2 spreadsheet from your considered materials, and you'll
3 see the name of the file in the lower right-hand
4 corner placed in there as a footer from your
5 materials. This is what I understand from the source
6 of your histogram to be the count, if you will, of the
7 total values and this shows 6559.

8 Would this be similar to what you would
9 expect to find from your own materials as to the
10 source of the data to create the histogram?

11 A. Yes.

12 Q. Okay. Now, we can't tell from this how many
13 values are under 65 without having to do a little math
14 and spending some time; correct?

15 A. Do you want an answer to that question?
16 Yes --

17 Q. Well, you agree --

18 A. -- it would take you some time.

19 Q. I'm going to try and save us some time.

20 A. Okay. By the way, this particular
21 demonstrative is incomplete. There's a jump. From
22 the readings, it jumps from 113 to 2892. You've left
23 off some pages, haven't you?

24 Q. I did that just for the ease of seeing
25 that -- without having to print a bunch of paper.

1 A. Okay. Fair enough.

2 Q. I've become environmentally conscious all of
3 a sudden in this courtroom and the trees I've seen
4 fallen as a result of it. So I agree with you. I
5 just took the beginning numbers, and, in fact, the
6 first two pages, so we could identify the first
7 observations that go to 65 STP.

8 I've handed you now the next demonstrative,
9 359. And it's the same thing, but what I've done is
10 just cut it off now at the level of the 65 STP to get
11 a count, if you will. And can you see what that
12 subtotal of observations are below 65 from my Excel
13 spreadsheet demonstrative?

14 MR. MCDANIEL: Excuse me, Your Honor. I
15 want to object on the basis of relevance. I know this
16 takes us back down memory lane to October of -- I
17 think it was 2008 when we were in trial.

18 Dr. Johnson testified that in Arkansas, 65
19 STP is not a relative -- is not a relevant criteria,
20 nor is it the one by which Arkansas soil tests are
21 adjudged for a hundred-percent forage yield. So I
22 think it's misleading.

23 THE COURT: Well, except we touched upon
24 that before, and the plaintiff is continuing to take
25 the position that 65 is a relevant number here. So I

1 understand the defendants' position. The objection's
2 overruled.

3 Go ahead.

4 Q. (BY MR. GARREN) The observations we see
5 there that would be below 65 STP are 594; correct?

6 A. Correct. Well, it's correct in terms of your
7 arithmetic.

8 Q. And my representations to you --

9 A. Yeah.

10 Q. -- which --

11 A. Yes.

12 Q. -- I've tried to explain to you what I've
13 done?

14 A. Yes.

15 Q. You would do the same thing if you wanted to
16 get that quick sum, by inserting a line, adding a sum,
17 and getting a subtotal; correct?

18 A. Correct.

19 Q. All right. And from the total observations
20 then, the 594 that we see are below 64 is less than 1
21 percent. Would you agree?

22 A. You mean below 65?

23 Q. Below 65.

24 A. Sixty-five or below to be precise.

25 Q. Sixty-five or below.

1 A. Yes.

2 Q. Correct. One percent or less, correct, of
3 the total 6500 observations?

4 MR. MCDANIEL: I think that's ten
5 percent.

6 MR. GARREN: I'm sorry. You're right.
7 Ten percent.

8 THE WITNESS: That was a great
9 opportunity for me. You took it away from me.

10 MR. MCDANIEL: But we're all paid to
11 make observations here, sir.

12 THE COURT: Mr. Garren.

13 Q. (BY MR. GARREN) We're in agreement it's
14 closer to ten percent?

15 A. That is correct.

16 Q. All right. I apologize for that error.

17 Let's talk a little bit about vertical
18 integration. I know you have, I think, an issue with
19 that term for preciseness, but that seems to be the
20 term that everybody's willing to accept and use in
21 this case.

22 It's true that the choice to become
23 vertically integrated is totally controlled by the
24 companies themselves; correct?

25 A. The choice? Whose choice?

1 Q. To fall into the categorization of vertically
2 integrated, they have to make a choice to move towards
3 that model; correct?

4 A. Who's they?

5 Q. The integrator.

6 A. The integrator themselves?

7 Q. Yes, sir. Yes, sir.

8 A. Yes. Certainly, certainly.

9 Q. The company.

10 A. No question about it.

11 Q. And is it true that one can be vertically
12 integrated where one of the processes involves in that
13 vertical chain an independent contractor?

14 A. Yes.

15 Q. Okay. You talked about stratification in
16 order to have some reliable, consistent sampling data
17 to use.

18 The process that you described to this court
19 today would be an expensive process to conduct --
20 would you agree? -- in the size of a million-acre
21 watershed.

22 A. Yes.

23 Q. Sometimes scientists are dealt the
24 unfortunate opportunity of having data that is
25 available to them and that's all that's available;

1 correct?

2 A. That does happen, yes, it does.

3 Q. In some of those instances, that data,
4 though, can be sufficient to draw some conclusions.
5 Would you agree?

6 A. In general.

7 Q. In general.

8 A. In general. But keep in mind the purpose for
9 which you're doing the analysis.

10 Q. Correct.

11 A. Let me give you a simple analogy.

12 Q. I think you've answered my question.

13 A. Okay. Fair enough.

14 Q. We're fine. But because of the limitations
15 of data sometimes, scientists have to deal with that
16 which is available for their work. Would you agree?

17 A. Depending on the purpose for which they're
18 doing the analysis, yes.

19 Q. Okay. So in this case, if the soil samples
20 that are being collected in the IRW result from a
21 process that we know exists today, that may be all the
22 data that's available for you to analyze; correct?

23 A. Yes. But now the question is, for what
24 purpose?

25 Q. All right. And with regard to that data, you

1 recognize that some of that data is now being
2 generated as a result of some regulations being
3 imposed as early as '98 in Oklahoma; correct?

4 A. Yes.

5 Q. And that formal regulations did not go into
6 effect in Arkansas until sometime later but there was
7 an increase of data being available. Did you observe
8 that --

9 A. Yes.

10 Q. -- in the date ranges?

11 A. Yes. Some of the data sources that
12 Dr. Johnson used go back to the year 2000. There's
13 more data observations in the latter part of the
14 period, yes.

15 Q. Okay. Now, the bias that you speak about in
16 this data really is from the perspective that you
17 criticize Dr. Johnson's inference that the STP average
18 should be applied across the whole watershed as
19 opposed to the sample data set; correct?

20 A. That's in part --

21 Q. Okay.

22 A. -- a criticism. But that's just part of it,
23 yes.

24 Q. You talked about some very large numbers and
25 some negative numbers.

1 You're not testifying here today that
2 Dr. Johnson used these extremely large numbers --
3 3,000, 5,000 -- in his data set, are you?

4 A. No.

5 Q. And you're not suggesting that he used the
6 negative numbers, are you?

7 A. No.

8 Q. And you would agree with me, just as you keep
9 reminding me what is the purpose, your histogram on
10 Exhibit 3125, that has no purpose to demonstrate
11 whether the waters in the IRW are contaminated;
12 correct?

13 A. No.

14 Q. You know, we've done this too many times.

15 It is correct that you're not trying to show
16 the water to be contaminated from your histogram that
17 you've prepared under Exhibit 3125?

18 A. Yes.

19 Q. Thank you.

20 MR. HOPSON: Well, that's clear.

21 Q. (BY MR. GARREN) Did you make any assessment
22 yourself to determine if, in fact, the samples used by
23 Dr. Johnson were not representative?

24 A. I think there's enough evidence that there's
25 no way of knowing. That is to say, his samples, you

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1 don't know the details with regard to the fields from
2 which the samples were taken, the size of the field,
3 the soil depth, you know none of that information. So
4 it is not possible to assess the representativeness.
5 Aside from the fact that if your purpose is to draw
6 inferences for the entire IRW, it's not
7 representative.

8 Q. So you, yourself, didn't do anything also to
9 determine the representative nature of that sampling;
10 correct?

11 A. Well, I did enough analysis to convince
12 myself that his sample is not representative of the
13 entire IRW.

14 Q. And --

15 A. But I did not do a separate, stand-alone
16 analysis to draw a representative sample.

17 Q. And it's your task in this case to criticize
18 Dr. Johnson; correct?

19 A. To evaluate his work, yes.

20 MR. GARREN: I apologize, Your Honor.
21 I'm really on a merry-go-round trying to figure out
22 where I am in this to get everything covered here. If
23 I can have a moment.

24 THE COURT: I understand. But I'm not
25 going to dissuade the defendants from cutting back on

1 all the topics that they could possibly touch upon.

2 MR. GARREN: I was trying to get it
3 there.

4 Q. (BY MR. GARREN) I have a question about
5 Defendants' Exhibit 6354, Dr. Rausser, so that I
6 understand the title to your table 2.

7 When it says "implications of changing
8 methods of vertical coordination of broiler products,"
9 you're not implying that the plaintiffs are, in fact,
10 suggesting a change of vertical coordination, are you?

11 A. No, I am not.

12 Q. Okay.

13 A. What -- can I explain or not?

14 Q. I think you've answered my question.

15 A. Fair enough.

16 Q. Let's look at your Demonstrative 342 just for
17 a second, if you would.

18 A. Yes.

19 Q. Are you there?

20 A. Yes, I am.

21 Q. As I look at this chart that you've prepared
22 for farm and nonfarm -- or real off-farm and real farm
23 income, would you agree that the real farm income
24 appears to be today, or at the end of your chart here,
25 2004 or 5, to be almost that of what it was in 1960?

1 A. Yes.

2 Q. Is this chart -- is it -- it is adjusted
3 based upon consumer price index; correct?

4 A. Yes. To make the dollars comparable
5 across --

6 Q. Okay.

7 A. -- the years that are recorded on the
8 horizontal axis.

9 THE COURT: Do you know whether real
10 farm income is based upon reported income on --

11 THE WITNESS: Oh, that's a different
12 question. That's a different question.

13 THE COURT: Go ahead.

14 THE WITNESS: The data the USDA has is
15 not consistent with the IRS data.

16 THE COURT: Surprise, surprise.

17 THE WITNESS: They're not comparable.

18 THE COURT: Mr. Garren.

19 MR. GARREN: Thank you.

20 Q. (BY MR. GARREN) Look at your Demonstrative
21 352, which was the chart on the Oklahoma STP values.

22 A. Yes. I'm there.

23 Q. With your outlier treatment, you show the
24 median there as 46 STP.

25 Are you familiar with what kind of yield

1 response or sufficiency -- I'm sorry -- sufficiency
2 that you would get on typical IRW forage of Bermuda
3 and fescue?

4 A. I certainly have looked at that data. I
5 don't --

6 Q. Do you remember seeing that little chart that
7 Dr. Johnson has in his report that to obtain 95
8 percent yield sufficiency, you would only need a 40
9 STP?

10 MR. MCDANIEL: Objection. That's soil
11 science. It's outside the scope of direct.

12 MR. GARREN: Okay.

13 THE COURT: Sustained.

14 MR. GARREN: I'll pass the witness, Your
15 Honor.

16 THE COURT: Redirect?

17 MR. HOPSON: I have nothing further,
18 Your Honor. Oh, wait a minute. I'm going to be told
19 otherwise in just a moment.

20 THE COURT: While they're talking, off
21 the record.

22 *(Discussion held off the record)*

23 THE COURT: Mr. Hopson, back on the
24 record.

25 MR. HOPSON: Back on the record.

REDIRECT EXAMINATION

BY MR. HOPSON:

Q. Dr. Rausser, just briefly. There was some discussion about whether growers had other alternatives other than growing. Do you recall that discussion?

A. Yes.

Q. But based on the record and evidence available in this case, do most growers who switch switch but continue to be poultry-growers?

A. Yes.

Q. And was there evidence in the record, if you can recall, of growers switching because of higher compensation?

A. Yes.

MR. HOPSON: Okay. Nothing further, Your Honor.

THE COURT: Recross?

MR. GARREN: Nothing, Judge.

THE COURT: Very well. You may be excused.

(Discussion held off the record)

THE COURT: We'll take a very short recess because I'm going to have to leave at about 3:45 for that optometrist appointment. We'll take as

1 short a break as our court reporter requires here.

2 (Short break)

3 MS. TUCKER: Good afternoon, Your Honor.
4 K.C. Tucker for the George's defendants.

5 Next, the defendants would like to play a
6 portion of the Derek Smithee videotaped deposition.
7 The clips run about 45 minutes but I understand that
8 we need to stop at 3:45; is that correct?

9 THE COURT: Please.

10 MS. TUCKER: Okay. I'll hand up a
11 packet of some of the exhibits that are discussed
12 during the deposition. I'd like to note that
13 Deposition Exhibits 9 and 27 are not included in your
14 packet because they were not on the pretrial order.

15 THE COURT: All right. You may begin.

16 MR. BULLOCK: Judge, before we hear
17 this, I'd like to state an objection that defendants'
18 witness Connolly who has previously testified -- what
19 Mr. Smithee is going to testify as to is Lake
20 Frances.

21 THE COURT: Oh, yes.

22 MR. BULLOCK: And Dr. Connolly
23 previously testified -- and I'm referring to, oh,
24 pages 9268 really through 9269 -- that his
25 investigation is that Lake Frances has a small, if

1 any, influence in terms of phosphorus issues in the
2 IRW.

3 So it would appear it me that Mr. Smithee's
4 testimony is irrelevant to this matter given the scope
5 of the defense.

6 THE COURT: All right. Let me take a
7 look at 9268 and 9269.

8 MR. BULLOCK: Begins at the top of 9267.

9 THE COURT: My pagination appears to be
10 a bit different. What --

11 MR. BULLOCK: I'm sorry. I can read
12 the -- beginning --

13 THE COURT: Do you have a page and line
14 number?

15 MR. BULLOCK: Yes. The relevant
16 testimony begins at the top of page 9267, line 1. I
17 guess I'd call particular attention to the court as to
18 lines 9 through 11 on that but the testimony is a
19 little more fulsome than that. I don't want to
20 mislead you concerning it.

21 THE COURT: Well now, the problem is, I
22 don't have a 9267. That's -- I have --

23 MR. BULLOCK: Oh, you're looking at
24 Smithee's testimony. I'm talking about --

25 THE COURT: Connolly's?

1 MR. BULLOCK: -- Connolly's testimony,
2 trial transcript 9267.

3 THE COURT: Oh, I'm sorry. All right.

4 MR. BULLOCK: Okay.

5 THE COURT: Now --

6 MR. BULLOCK: Mine's sort of annotated.
7 I guess I don't have any problem passing it around to
8 everybody. I don't have any secrets here. I haven't
9 managed to keep any in most of my life. So --

10 THE COURT: Well, perhaps the most
11 efficient way to do it is to allow defendants to
12 respond. Go ahead.

13 MS. TUCKER: Your Honor, I don't feel
14 that the fact that there may be some testimony by
15 Dr. Connolly regarding any contributions that Lake
16 Frances may have to nutrient loading in the watershed
17 bears any weight on the 30(b)(6) deposition testimony
18 of a state agent of the State of Oklahoma.

19 Derek Smithee in his deposition testifies to
20 a number of other issues, including nutrient loading
21 from other sources in the watershed. If plaintiffs
22 want to argue that defendants have presented
23 inconsistent testimony, they're welcome to do that at
24 closing, but I don't believe it's a basis to exclude
25 Mr. Smithee's deposition.

1 THE COURT: All right. The objection's
2 overruled. You may begin.

3 MR. BULLOCK: We need -- we probably
4 ought to give -- did we give an exhibit number to the
5 Smithee deposition?

6 THE COURT: We did not. It should be
7 what?

8 MS. TUCKER: Fourteen.

9 THE COURT: All right. We will have
10 this marked as Court's Exhibit 14 and admitted.

11 MS. TUCKER: Thank you, Your Honor.

12 THE COURT: Yes.

13 *(Videotaped deposition of Derek Smithee is played)*

14 MS. TUCKER: Your Honor, I think we're
15 at a good stopping point, if it's time for you to
16 go.

17 THE COURT: Very good. Thank you very
18 much. We're in recess.

19 *(The proceedings were recessed)*
20
21
22
23
24
25

C E R T I F I C A T E

I, Brian P. Neil, a Certified Court Reporter for the Eastern District of Oklahoma, do hereby certify that the foregoing is a true and accurate transcription of my stenographic notes and is a true record of the proceedings held in above-captioned case.

I further certify that I am not employed by or related to any party to this action by blood or marriage and that I am in no way interested in the outcome of this matter.

In witness whereof, I have hereunto set my hand this 6th day of January 2009.

s/ Brian P. Neil

Brian P. Neil, CSR-RPR, CRR, RMR
United States Court Reporter